ZHANG et al. Appl. No. 10/813,131 August 10, 2006

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A turbine component having a plurality of film-cooling holes each formed in a region of the component to be cooled, said cooling holes each having a specified uniform diameter, each hole at an exit thereof formed with a concentric counter-bore of a predetermined depth, each[[,]] said hole and respective counterbore being parallel and connected by a substantially 90° shoulder; said component having a coating applied thereto at least in said region, wherein the counter-bore provides an area for excess coating material to accumulate without reducing the specified diameter.
- 2. (Original) The turbine component of claim 1 wherein, for a specified diameter of about 0.033 inch, the counter-bore has a diameter of about 0.053 inch.
- 3. (Original) The turbine component of claim 2 wherein the counter-bore has a depth of about 0.030 inch.
- 4. (Original) The turbine component of claim 2 wherein said coating comprises a first bondcoat layer and a second thermal barrier coating layer.
- 5. (Original) The turbine component of claim 4 wherein the bondcoat layer is an NiAl-based material.
- 6. (Original) The turbine component of claim 5 wherein the thermal barrier coating layer is a yttria stabilized zirconium material.
- 7. (Original) The turbine component of claim 1 wherein the turbine component comprises a gas turbine bucket having an airfoil portion and a shank portion, and wherein said region comprises the airfoil portion.

ZHANG et al. Appl. No. 10/813,131 August 10, 2006

- 8. (Original) The turbine component of claim 7 wherein, for a specified diameter of about 0.033 inch, the counter-bore has a diameter of about 0.053 inch; and wherein the counter-bore has a depth of about 0.030 inch.
- 9. (Original) The turbine component of claim 7 wherein said coating comprises a first bondcoat layer and a second thermal barrier coating layer; and wherein the bondcoat layer is an NiAl-based material.
- 10. (Currently Amended) A gas turbine bucket having an airfoil portion and a shank portion, said airfoil portion having a plurality of film-cooling holes therein, each hole having a specified diameter and at an exit thereof <u>is</u> formed with a concentric counter-bore of predetermined depth, each[[,]] said hole and respective counterbore being parallel and connected by a <u>substantially</u> 90° shoulder; said component having a coating applied thereto at least in said region, wherein the counter-bore provides an area for excess coating material to accumulate without reducing the specified diameter; and wherein said coating comprises a first bondcoat layer and a second thermal barrier coating layer.
- 11. (Original) The gas turbine bucket of claim 10 wherein the bondcoat layer is an NiAl-based material.
- 12. (Original) The gas turbine bucket of claim 11 wherein the thermal barrier coating layer is a yttria-stabilized zirconium layer.
- 13. (Currently Amended) A method of maintaining cooling efficiency of film-cooling holes in a turbine component where the film-cooling holes have specified diameters and the turbine component has a protective coating thereon comprising:

ZHANG et al.
Appl. No. 10/813,131
August 10, 2006

a) before coating, forming each film-cooling hole with a concentric counter-bore at an exit end of the film-cooling hole, each said hole and respective counterbore being parallel and connected by a substantially 90° shoulder; and

b) spraying the coating onto the turbine component at least in areas surrounding the film-cooling holes such that excess coating material accumulates in the counter-bore without reducing the specified diameters of the cooling holes.